



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,855	12/26/2001	Yasukazu Nihei	Q66571	8124

7590 01/11/2005  
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER
----------

GURZO, PAUL M

ART UNIT	PAPER NUMBER
----------	--------------

2881

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/025,855	Applicant(s) NIHEI, YASUKAZU	
	Examiner Paul Gurzo	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,2,7,10,13-21,26,29,32-41,45-48,51-53 and 56-58 is/are rejected.  
 7) ☒ Claim(s) 3-6, 8, 9, 11, 12, 22-25, 27, 28, 30, 31, 42-44, 49, 50, 54, and 55 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 7, 10, 13-21, 26, 29, 32-41, 45-48, 51-53, and 56-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Okada et al. (6,177,968).

Regarding claims 1, 20, and 39, 968 teaches method for displaying an image, comprising the steps producing a polarization inversion pattern in a ferroelectric member in accordance with image information as to produce a surface charge pattern corresponding to the polarization inversion pattern, and producing an image contrast in a contrast production member by an influence of the surface charge pattern, where the contrast production member is joined to the ferroelectric member (col. 2, lines 15-49, col. 6, lines 9-61, col. 8, lines 62-67, and col. 16, lines 6-18).

Regarding claims 2 and 21, 968 teaches a heating means to produce a heat distribution in Example 1.

Regarding claims 7, 26, and 48, 968 teaches a bias voltage application (col. 5, lines 21-26) as well as a transparent conductive film (Fig. 1, ref. 1 and 11).

Regarding claims 10, 29, and 51, the Examiner contends that it is inherent that the transparent film is transparent to infrared light.

Regarding claims 13-19, 32-38, 40, 41, 45-47, 52, and 53, 968 depicts a base in Fig. 1 and teaches the use of an inorganic oxide as a tin oxide which teaches on the claimed metal oxide and electrochromic material (col. 13, lines 24-27 and col. 14, lines 8-14). Further, it is inherent that the oxide can be viewed as a dopant and the teaching of a metal oxide as stated above teaches on the claimed dopant and/or oxide composition.

Regarding claims 56-58, 968 teaches a charge pattern as taught above, and the charge pattern will produce charged particles. Further, they teach an alignment film (27) that is a base on the contrast production member (22) where the particles may be aligned (col. 8, lines 48-67). Because the particles are aligned there, they must have been dispersed into the base. They further teach display qualities and therefore an image contrast (col. 2, lines 43-49).

#### ***Allowable Subject Matter***

Claims 3-6, 8, 9, 11, 12, 22-25, 27, 28, 30, 31, 42-44, 49, 50, 54, and 55 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or render obvious the application of infrared light or a plurality of light to heat conversion elements or color formation elements or conductive and non-conductive portions.

#### ***Response to Arguments***

Applicant's arguments filed 10/27/04 have been fully considered but they are not persuasive. Applicant argues that 1) the prior art does not teach claims 1, 20, and 39, 2) there is no heat distribution, 3) the film is not transparent to infrared light, 4) there is no dispersion of charged particles, and 5) there is no electrochromic material.

Regarding 1), 968 teaches a polarization inversion pattern in a ferroelectric member (col. 2, lines 18-49 and col. 8, lines 62-67) to provide image display (col. 5, line 66 - col. 6, line 3) and produce a surface charge pattern (col. 5, lines 27-37 and col. 16, lines 6-18). Further, the contrast production member is used to produce the image contrast according to Applicant's specification. Looking at 968, they teach a ferroelectric member (such as a liquid crystal) that is disposed between a first a second substrate (col. 6, lines 9-61). Further, Fig 2 clearly shows the contrast production member (22) that is disposed above and joined to the ferroelectric member (col. 8, lines 48-56).

Regarding 2), 968 teaches a heat distribution within the panel that corresponds to display qualities and therefore image information (col. 2, lines 43-49).

Regarding 3), 968 teaches that the transparent film (1 and 11) is formed of glass (col. 11, lines 51-57), and glass is transparent to infrared light.

Regarding 4), 968 teaches a charge pattern as taught above, and the charge pattern will produce charged particles. Further, they teach an alignment film (27) that is a base on the contrast production member (22) where the particles may be aligned (col. 8, lines 48-67). Because the particles are aligned there, they must have been dispersed into the base.

Regarding 5), an electrochromic material is merely a substance that changes color or transparency when subjected to charged electrodes, as in the liquid crystal display. The electroconductive material (col. 13, lines 24-27 and col. 14, lines 8-14) will achieve the same result as the claimed material because it is used in a liquid crystal display and has transparent qualities as stated above and there will be a change in color because the display produces numerous desired colors. Finally, even though the dopant may not necessarily be used to absorb

Art Unit: 2881

does not mean that it cannot and the Examiner contends that the resistive sheet (19) can absorb the desired light.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Gurzo whose telephone number is (571) 272-2472. The examiner can normally be reached on M-Fri. 7:30 - 6:00.

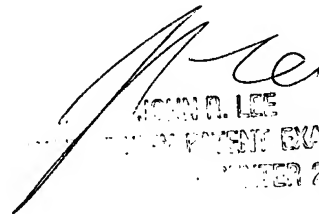
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Lee can be reached at (571) 272-2477. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2881

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMG



JOHN D. LEE  
SENIOR PATENT EXAMINER  
OCT 2000